IT Initiative Supplement

April 26, 2010

I. Project Description

Project Title: CCUBS Maintenance and Support
Brief Description of the Project Title: Child Care Under the Big Sky (CCUBS) supports Montana's child care program. Primary functions include child care licensing, provider inspection, family eligibility determination for subsidy & payment processes, federal error rates, quality assessment, quality improvement program, and contract management. CCUBS interfaces with TEAMS, CAPS, CDS and the MSU Practitioner Registry. Enhancements and maintenance of the CCUBS system is managed by the Technology Services Division (TSD) through a contract with an outside provider.
Statewide Priority: 1
Agency Priority: 1
Estimated Completion Date: FY2015
IT Project Biennium: FY2010-11, FY2012-13, FY2014-15
Request Number:
Version:

Agency Number: 6901
Agency Name: Department of Public Health and Human Services
Program Number:
Program Name: Early Childhood Services Bureau (ECSB)

A. Type of Project (check all that apply)
       Enhancement   **X**
       Replacement
       New
       O&M   **X**

B. Type of System (check all that apply)
       Mid-Tier   **X**
       Mainframe
       GIS
       Web   **X**
       Network
       Desktop

II. Narrative

C. Executive Summary

CCUBS is a comprehensive childcare system that integrates all the functions required to provide subsidized childcare to qualified families in Montana. It provides childcare eligibility and licensing functions, plus automated contracts management and Web-based invoice and payment entry for childcare providers. CCUBS produces reports, notifications, licenses and other documents necessary to support program functions, daily, monthly, and on pre-defined periodic schedules. CCUBS also provides federal reports on a monthly basis to ACF. CCUBS is supported by a real time query tool, DISCOVER, which is used extensively for functional reporting, management reporting and problem determination.

The CCUBS system is also paired with a server based licensing inspection software program called SANSWRITE. This proprietary application also comes with tablets that are used to gather information from provider inspections to document deficiencies in child care settings. Inspections are uploaded to the SANS WRITE server for viewing from a 'public' and 'private' web portal.

Project Purpose and Objectives:

The purpose of the CCUBS project is to provide the maintenance and enhancement support to ensure continuous and ongoing operations. New contracts, federal requirements, software upgrade, new quality assessment and incentive efforts, and program driven improvements make continual enhancement of the CCUBS system a reality. In addition, new technology is driving changes in childcare systems.

Objectives for the CCUBS system include:
1) Develop an automated interface for the ARMS system (Accounts Receivables).
2) Develop Management Reports for deficiencies moved from the SANS WRITE application to the CCUBS system. Will include the movement of deficiency information into CCUBS for licensing and other critical functions.
3) Develop an interface for the federal 'Error Rates' (Measuring Improper Authorization For Payment) requirement for ACF.
4) Convert CCUBS forms, programs, reports and notifications from ORACLE '6i' to '10g'.
5) Update DISCOVER to 'web enabled' for efficiency and to eliminate problems brought about by new versions of WINDOWS (VISTA and WINDOWS 7).
6) Develop an Assessment solution for CCUBS to automate the new Assessment program in the ECSB that measures day cares for quality, and develops an Assessment Improvement Plan for quality improvements.
7) Develop new rate structures for billing and payment methods, and incorporate the new incentives programs that will come from the Assessment Improvement Plans (STARS).
8) Develop electronic versions of documents for electronic retrieval from a portal to reduce mailing costs.
9) Develop a better model for Contracts development and implementation in CCUBS.
10) Fix the interface between CCUBS and the CAPS system to reduce problems with the CCUBS facilities recognition piece in CAPS.
11) Develop the ability to keep more historical data in CCUBS.
12) Tune internal transactions for better response. Some site in the state experience extreme waits

Technical Implementation Approach:

The CCUBS system runs on an IBM RS6000 AIX operating system – using an ORACLE web server 9iAS Release 1. The database for the CCUBS system is ORACLE version 10.2.0.4. ORACLE FORMS and REPORTS are currently 6i. The CCUBS database holds approximately 100 gigabytes (GB) or data, with about 85% of that space dedicated to PDFs. There about 236 forms (screens) and 153 reports. There are more than 250,000 lines of PL / SQL code.

Neither the ORACLE web server or the ORACLE FORMS and REPORTS versions are supported by ORACLE anymore. These two items are currently under review for conversion.

The CCUBS system interfaces with the Child and Adult Protective Services (CAPS) system for background checks (online) and facility alerts through a batch process when a CCUBS worker has a report of abuse in CAPS. CCUBS also interacts with TANF for eligibility information through the Centralized Data System (CDS) – both real time and in batch. The Virtualized Human Services Pavilion (VHSP) provides a portal for access to CCUBS. CCUBS interfaces with the AWACS system with a batch interface. Montana State University's Early Childhood Program Practitioner Registry and Training Database is updated weekly through a batch process in CCUBS.

Project Schedule and Milestones:
D. Business and IT Problems Addressed

The ORACLE FORMS and REPORTS and the ORACLE web Server are no longer supported by ORACLE (the vendor). These need to be converted to 10g, and are currently in the process of evaluation and conversion. This will require extensive programmer commitment testing in 2010. All of the bar coding will need to be re-installed and tested to make sure no interruption in CCUBS business occurs.

The business and IT problems to be addressed are delineated in the Project Objectives above.

E. Alternative(s)

Alternatives Considered:

Start the process of working on obtaining a new system.

Rationale for Selection of Particular Alternative:

It is cheaper to continue to make modifications to the CCUBS system.

F. Narrative Detail

CCUBS maintenance and enhancement efforts have resulted in significant improvements in CCUBS functionality over the past 2 years. Several new Contracts types have been implemented in CAPS. Modifications have been made to adjustments to fix existing problems. Printing functions have been added to print out Notes for administrative needs. Notifications and reports have been changed to work as required and to ensure timely delivery of notices. Tuning

problems have been identified and modifications made to increase efficiency, however, there is still a lot of work to do on this problem.

New functionality for children outside of license age ranges and citizenship indicators for children receiving child care funding have been implemented. New fields have been added to the SANSWRITE portal, public and private.

Significant effort will be made in the next year to bring the CCUBS system up to date on the software it is written in. The web version used to access CCUBS, will also be updated to a supportable version.

An interface for ARMS will be constructed to allow for automated updates between CCUBS and the Accounts Receivable system for DPHHS.

The importation of data from the SANSWRITE server to populate the CCUBS database will be accomplished along with the development of deficiency reporting for licensing.

The federal 'Error Rates' process will need to be integrated with CCUBS in the future.

The capture and upload of assessment results from the assessment process will need to be done as part of the STARS and quality improvement effort in ECSB. This also includes the development of a quality improvement plan, based on the assessment process.

Changes will also need to be made to accommodate new reimbursement methods and quality improvement incentives.

III. Costs

G. Estimated Cost of Project:

Estimated Cost of Project		FY2010	FY2011	FY2012	FY2013	FY2014	FY2015	Total
1.	Personal Services - IT Staff							0
2.	Personal Services - Non IT Staff							0
3.	Contracted Services	596,712	957,976	1,111,200	1,111,200	1,111,200	1,111,200	5,999,488
4.	ITSD Services							0
5.	Hardware							0
6.	Software							0
7.	Telecommunications							0
8.	Maintenance							0
9.	Project Management							0
10.	IV & V							0
11.	Contingency							0
12.	Training							0
13.	Other							0
Total Estimated Costs		596,712	957,976	1,111,200	1,111,200	1,111,200	1,111,200	5,999,488

Total Funding:

IV. Funding

H. Funding

Total Funding

Fund		FY2010	FY2011	FY2012	FY2013	FY2014	FY2015	Total
1.	03598	298,356	478,988	555,600	555,600	555,600	555,600	2,999,744
2.	03096	298,356	478,988	555,600	555,600	555,600	555,600	2,999,744
3.								0
4.								0
5.								0
6.								0
Total Estimated Costs		596,712	957,976	1,111,200	1,111,200	1,111,200	1,111,200	5,999,488

Cash/Bonded:

Bill Number:

V. Cost upon Completion

1. **Operating Costs upon Completion**
   This is an ongoing effort and does not have a completion date.

   FTE:

   Personal Services Costs:

   Operating Costs:

   Maintenance Expenses:

   Total Estimated Costs:

2. **Funding Recap**
   This is an ongoing effort and does not have a completion date.

   Fund Type:

   Amount:

   Total Funding:

V. Risk Assessment

A. Current IT Infrastructure Risks

1. **Current application 10+ years old?**   NO__
     Date of last major upgrade?

2. **Current application is based on old technology?**   NO__
     **If yes, what is the current hardware platform, operating system, and programming
     languages used to support the application?**

3. **Is the agency not capable of maintaining the current application with internal technical
staff?**   YES__
     If yes, who supports the application today?   Northrop Grumman

4. **Other IT infrastructure risks?**   NO__
     If yes, provide further detail.

B. Current Business Risks

1. **What are the risks to the state if the project is not adopted?**

Two of the key software components that the CCUBS system is installed on are obsolete, the web
server, and the FORMS and REPORTS component. If the system were to experience an
ORACLE based failure, the vendor (ORACLE) will not support it product, because it is obsolete.
This could result in catastrophic failure for the system.

Ensuring the fiscal integrity of the CCUBS system requires ongoing maintenance. New Contract
types have required continueous changes. Failure to continue to support these will result in the
loss of fiscal integrity.

The assessment and STARS program will require significant technical effort to ensure
components are integrated into the CCUBS system. Failure to support ECSB's implementation
of these functions will result in significant manual effort and a deterioration of fiscal integrity.

2. Does the current application meet current business requirements?   YES__
     If "no", what specific business functions does the application lack?

C. Project Risk Assessment

1. Describe any major obstacles to successful implementation and discuss how those obstacles
will be mitigated.

Table H   Risk Assessment

Description	Severity (H/M/L)	Probability of Occurrence (%)	Estimated Cost	Mitigation Strategy
Testing ORACLE upgrades to birng the CCUBS system back to a supportable version of software.	H	Unknown (Possible)	1 technical FTE and ½ client FTE	Develop a plan and schedule for implementation. Identify all points of change and target for testing. Validate production (including notices) prior to making the system available.
Bar Code History in ECSB was rocky and long. Need to address this issue.	H	Unknown (Possible)	Included above.	Communicate with ECSB, the changes that are necessary for the ORACLE conversion. Walk through plan for their input and identify steps necessary to address their issues.